NASCIO
Representing Chief Information Officers of the States

October 29, 2004

Office of the Secretary
Federal Communications Commission
445 12th St., SW, Rm. TW-A325
Washington, DC 20554

Dear Chairman Powell and Commissioners Abernathy, Copps, Martin, and Adelstein:

On behalf of the National Association of State Chief Information Officers (NASCIO), I am pleased to offer these comments in regard to the FCC notice of proposed rulemaking (NPRM) "Review of the Emergency Alert System" (EB Docket No. 04-296; FCC 04-189).

By way of introduction, let me first point out that NASCIO represents state chief information officers (CIOs) and information resource executives and managers from the 50 states, six U. S. territories, and the District of Columbia. State members are senior officials from any of the three branches of state government who have executive-level and statewide responsibility for information resource management. Representatives from federal, municipal, and international governments and state officials who are involved in information resource management but do not have chief responsibility for that function participate in the organization as associate members. Private-sector firms and non-profit organizations may join as corporate members.

Traditionally, state CIOs have not had any involvement with the Emergency Alert System (EAS). However, the rise of the homeland security practice at the national level and in the states has increasing drawn state CIOs into issues such as emergency alerting. In fact, a significant majority of state CIOs are now a part of state homeland security task forces and commissions. Many of them are integrally involved in a wide range of information and communications technology issues related to the law enforcement, public safety, public health, and emergency management aspects of homeland security. Moreover, NASCIO has dedicated itself to promoting "architecture," or disciplined design, for information systems that cross functional boundaries within government as homeland security systems often do. Therefore, NASCIO would like to offer some limited comments on our emerging involvement with an alternate public alert and warning system (APAWS) as discussed under section E of the NPRM. Our comments are organized by the relevant paragraph numbers.

**31. What level of penetration should we seek and what is the best mechanism for reaching that goal?**

While NASCIO cannot put forth a specific percentage of market penetration that would be the "best," we certainly believe that the nation should aspire to achieving as close to 100% penetration as is practicable. We believe that the many technological options available to supplement the EAS could drastically improve the currently reported penetration percentages of EAS. NASCIO has recently teamed up with the creator of the AMBER Alert Consortium

(http://www.amberalert911.org), Chris Warner, and the former chair of the Partnership for Public Warning (PPW), Dr. Peter Ward, and proposed a pilot project to the Department of Homeland Security (DHS) that would use two regional clusters of states to enhance the AMBER Alert Consortium's proven, Internet-based concept into an all-hazard public warning system. (AMBER Alert 911 has generated tremendous enthusiasm among the governors and we expect that it will be rapidly rolled out nationwide.) This pilot project should give us some preliminary findings as to what the practicable penetration would be for an Internet-based APAWS.

**32. Because EAS relies almost exclusively on delivery through analog radio and television broadcast stations and cable systems, is EAS, in the current communications universe, outdated? Instead, should there be a concerted government/industry effort to combine EAS with alternative public alert and warning systems (APAWS) to form a comprehensive national public warning system capable of reaching virtually everyone all the time?**

NASCIO believes that the current system is not so much "outdated" (except in the sense that its analog functioning limits its capabilities). We assume that there will be a future for the EAS or a similar communications mechanism as a stand-alone system dedicated to the needs of the President and participating as part of a larger conglomerate of systems. However, as it stands now, it is rendered less effective by the multiplicity of communications channels. The current communications universe proves Herbert Simon's observation that a wealth of information creates a poverty of attention. This poverty of attention is unacceptable when it comes to public warnings. Thus, NASCIO believes that there should be a concerted public-private effort to combine EAS with APAWS to form a comprehensive national public warning system (PWS) capable of reaching virtually everyone all the time with some selectiveness based upon geographic and risk-based criteria.

**32. (contd.) How could a combined warning system that makes use of some or all of the features described here be implemented? Should the Commission require any APAWS to participate in the existing EAS and, if so, which ones and how should they participate? For example, should all APAWS be required to be compatible with the existing EAS protocol? In considering these issues, should our analysis distinguish between wireless systems used primarily for one-versus two-way communication, or point-to-point or multi-point versus broadcast? Commenters should discuss any legal or practical barriers to its implementation and effectiveness, noting whether legislation would be required from Congress or by Executive Order.**

NASCIO believes that any PWS technology solution should be aligned to the business-process needs of the information providers, disseminators, and users. Any system that requires people to adapt to technology will be less effective and maybe even a failure. The people issue here is to figure how to collect warning information from an extremely large number of official sources, who are primarily concerned about the local (rather than the national) implications of those events, and deliver it to a much larger pool of potential recipients via multiple, ever-changing, technology-based channels.

In this case, NASCIO believes the answer is to collect warning information once and distribute it over as many channels to as many people as necessary at any given time. The best way to do this is to build one mechanism where an authorized warning provider, including FEMA, can deposit the information and then any number of approved information disseminators, including EAS, can pick it up and feed it to recipients based on certain rules for using the information via one-way, two-way, point-to-point, point-to-multi-point, and broadcast communications devices. The system should also distribute the alert to residents of specific geographic locations. The AMBER Alert Consortium has proven that the Internet is capable of serving as this centralized collection and distribution point. While NASCIO is not currently aware of any legal barriers to creating an Internet-based PWS along the lines of our concept, the primary practical concern is to be able to ensure the reliability of the warning mechanism. The issues of security and redundancy have already been addressed by the AMBER Alert Consortium, which has partnered with some of the leading solutions providers in these areas. The lessons learned and best practices from AMBER Alert 911 will be incorporated into our all-hazard PWS concept.

**33. As an alternative, would the appropriate approach be to integrate EAS into a PAW "system of systems" by adopting and using a single, integrated interface that would link the emergency manager and all emergency notification and delivery systems, regardless of the technology on which a particular system is based? In this regard, we note that the Organization for the Advancement of Structured Information Standards (OASIS), a not-for-profit, international consortium that addresses the development, convergence and adoption of e-business standards, has adopted the Common Alerting Protocol (CAP) as an OASIS standard…We seek comment on whether the CAP could act as an effective interface through which an emergency manager could access multiple emergency notification services, including EAS…We seek comment on any particular needs or considerations we should afford rural areas.**

NASCIO's pilot project supports such a technology-neutral approach, which we recognize as the most viable over the long term in a world where no one can predict what technologies will disrupting the market more than a few years out. NASCIO also recognizes that there is no magic bullet when it comes to standards. However, NASCIO finds OASIS's CAP standard to be a suitable starting point for getting things off the ground when it comes to all-hazard warnings. While our concept will end up working with only one standard, that does not prohibit any warning disseminator from taking the information from our CAP-based system, and translating it into another open or proprietary standard for distribution over a particular channel, network, or technology. (Any effort to implement a strict, CAP-only policy for downstream disseminators would have to be led by the appropriate policy makers.)

It has been remarked (jokingly) that the best thing about standards is that there are so many to choose from. However, NASCIO is committed to ensuring that the single standard undergirding the all-hazard PWS will be open—that is, non-proprietary—and evolved in an inclusive manner that takes into account the opinions and needs of all stakeholders, including television, radio, multi-channel video, microwave, and satellite service providers among others. However, we must try to reduce the complexity and diversity of the technical architecture in order to minimize the costs and maximize the reliability of the system, which will increase adoption. Adoption is

the key to success for any PWS that seeks to collect information closest to its source and deliver it to citizen/users on their terms.

Finally, NASCIO's pilot project would include state participants and observers with significant rural populations. We expect that the project will identify any particular needs or considerations for this part of the nation's populations. We are also confident that by using a technology-neutral mechanism that a combination of policy emphasis, market forces, and technological advance will ensure that rural populations are well served now and into the future.

**35. Finally, to what extent does an effective public warning system depend on the consumer electronics equipment that receives the warning?**

NASCIO believes that an effective public warning system will depend on many different types of consumer electronics devices. Our all-hazards PWS pilot project will take into consideration the implications of automatic-turn-on functionality for our communications standard. Again, the importance of taking a technology-neutral stance here cannot be understated. This also goes for our commitment to open and inclusive standards-development process. This is where NASCIO, which is a generalist on these issues, can serve as an ideal facilitator among a diverse group of stakeholders who might not be able to entirely relinquish control to one another in the standards-setting process.

Again, NASCIO appreciates this opportunity to comment on the future of the EAS. We would be happy to provide more information about out all-hazard PWS pilot project, if you are interested, and to hear any suggestions the FCC might have as to how our concept could serve your needs. Please feel free to contact me by e-mail at thomas.jarrett@state.de.us or by phone at (302) 739-9629 with any questions or concerns you might have. You can also contact Doug Robinson, NASCIO's executive director, by email at drobinson@amrinc.net or by phone at (859) 514-9171.

Yours truly,

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Tom Jarrett, President
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